

What is Claimed is:

1. An absorbent article comprising a substantially liquid pervious topsheet, a substantially liquid impervious backsheet and an absorbent core between said topsheet and said backsheet, wherein said absorbent article comprises a nonwoven fabric, wherein said nonwoven fabric
 - a) comprises a plurality of fibers and
 - b) has a surface tension of at least 65 mN/m when being wetted with saline solution and
 - c) has a liquid strike through time of less than 5 s for a fifth gush of liquid and
 - d) comprises polymers comprising hydrophilic monomer molecules and a reaction product of a radical polymerization initiator molecules chemically grafted to the surface of at least a part of said plurality of fibers comprised by said nonwoven fabric, wherein the amount of radical polymerization initiator molecules is less than 2 wt% of the monomer molecules.
2. Absorbent article according to claim 1, wherein said nonwoven fabric comprises at least a first plurality of fibers and a second plurality of fibers, wherein said first plurality of fibers is different from said second plurality of fibers.
3. Absorbent article according to claim 2, wherein only said first plurality of fibers has hydrophilic polymers grafted to their surface.
4. Absorbent article according to claim 1, wherein said strike through time after said first and said fifth gush of said nonwoven fabric does not decrease more than 5% after storage of said absorbent article for at least 10 weeks.
5. Absorbent article according to claim 1, wherein said polymerized hydrophilic monomer comprises a molecule comprising at least one unsaturated double bond.
6. Absorbent article according to claim 5, wherein said polymerized hydrophilic monomer comprises a molecule comprising a group which is able to react with an acid or base to form a salt.
7. Absorbent article according to claim 6, wherein said polymerized hydrophilic monomer comprises acrylic acid or its salt.
8. Absorbent article according to claim 1, wherein said polymers add at least on said first plurality of fibers from 0.3 wt% to 10 wt%.
9. Absorbent article according to claim 8, wherein said polymers are added to said first and said second plurality of fibers in a weight percent range of 0.3 wt% to 10 wt%.

10. An absorbent article according to claim 1, wherein said topsheet comprises said non-woven fabric.
11. An absorbent article according to claim 1, wherein said absorbent core is provided with a core wrap material, which comprises said nonwoven fabric.
12. A process for treating a plurality of fibers suitable for making an absorbent article, said process comprising the steps of:
 - a) providing a plurality of fibers
 - b) providing an aqueous solution comprising hydrophilic monomers and radical polymerization initiators
 - c) contacting said plurality of fibers with said aqueous solution
 - d) exposing said plurality of fibers to UV radiation for up to 2 seconds.
13. A process according to claim 12, wherein said plurality of fibers is a nonwoven fabric.
14. A process according to claim 12, wherein said plurality of fibers are individual filaments and wherein said process comprises a further step of forming said plurality of fibers into a nonwoven fabric.
15. A process according to claim 14, wherein said process uses at least a first plurality of fibers and a second plurality of fibers, characterized in that first plurality is chemically different from said second plurality of fibers.
16. A process according to claim 15, wherein only said first plurality of fibers has been treated according to the process of claim 11.
17. A process according to claim 12, wherein said process further comprises an agent to reduce homopolymerization of the monomers, said agent being added to said aqueous solution.
18. A process according to claim 12, wherein said process further comprises a washing step after the plurality of fibers was exposed to UV radiation.
19. A process for making an absorbent article, said process comprising the process according to claim 12.
20. An absorbent article, which is made according to a process of claim 11.